revised pages 1 and 2 of the application in accordance with the recommendation in PCT Rule 5 and Section 204 of the PCT Administrative Instructions. Additionally, applicants have corrected a typographical error on page 5 of the application. No new matter has been added. Withdrawal of the Examiner's objection is respectfully solicited.

The Examiner rejected Claim 5 under 35 U.S.C. §112, ¶2, as being indefinite. More particularly, the Examiner took the position that the term "suitable" in claim 5 rendered the claim indefinite because the term was not defined by the claim or the specification. The Examiner concluded that one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Favorable reconsideration of the Examiner's position is respectfully solicited.

The "distinctly claim" requirement of 35 U.S.C. §112, ¶2, means that the claims must have a clear and definite meaning when construed in the light of the complete patent document,[2] and the test of definiteness is whether one skilled in the art would understand the bounds of the claim when reading it in the light of the specification.[3] Also, the degree of precision which is necessary in a claim is a function of the subject matter which is claimed.[4] The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. §112, ¶2.[5] Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification. In reviewing a claim for compliance with 35 U.S.C. §112, ¶2, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. §112, ¶2, by providing clear warning to others as to what constitutes infringement of the patent.[6] Accordingly, a claim term

---

2) *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 227 USPQ 293 (Fed. Cir. 1985).

3) *Morton Int. Inc. v. Cardinal Chem. Co.*, 5 F.3d 1464, 28 USPQ2d 1190 (Fed. Cir. 1993); *Orthokinetics Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1 USPQ2d 1081 (Fed. Cir. 1986).

4) *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986); *Miles Labs., Inc. v. Shannon, Inc.*, 997 F.2d 870, 27 USPQ2d 1123 (Fed. Cir. 1993)

5) *Seattle Box Co., v. Industrial Crating & Packing, Inc.*, 731 F.2d 818, 221 USPQ 568 (Fed. Cir. 1984).

6) See, e.g., *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). See also *In re Larsen*, No. 01-1092 (Fed. Cir. May 9, 2001) (unpublished); and *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1366, 71 USPQ2d 1081, 1089 (Fed. Cir. 2004).

that is not used or defined in the specification is not indefinite if the meaning of the claim term is discernible.[7]

Applicants' Claim 5 relates to a *"process for preparing a polyamide"* which inter alia comprises *"the reaction of monomers suitable for forming a polyamide to give a polyamide."* The technical field of polyamides is well established in the art and a person of ordinary skill in the pertinent art is well aware of the nature of monomers which are *"suitable"* to form polyamides.[8] Moreover, applicants enumerate representatives of such monomers.[9] Considering the technical background knowledge of a person having ordinary skill in the art the reference to monomers which are *"suitable for forming a polyamide"* is deemed to meet the *"reasonable degree of precision and particularity"* which is required under Section 112, ¶2.[10] Withdrawal of the Examiner's respective rejection is therefore respectfully solicited.

Further, the Examiner rejected Claims 1 to 6 under 35 U.S.C. §102(b) as being anticipated by the teaching of ***Rehmer et al.*** **(US 5,294,688)**. As summarized by the Examiner, the reference addresses UV-crosslinkable copolymers which are built up from

A) from 99.5 to 75% by weight of olefinically unsaturated monomers,

B) from 0.5 to 25% by weight of certain unsaturated compounds, and

C) from 0.01 to 10% by weight of certain copolymerizable, olefinically unsaturated acetophenone and/or benzophenone derivatives.

It is immediately apparent from the monomers which are employed in accordance with the teaching of ***Rehmer et al.*** that the resulting polymer chain does not comprise -C(=O)-N(R)- linkages and the polymers which are addressed in the reference, therefore, do not fall within the realm of polyamides.

In contrast to the polymers of ***Rehmer et al.*** applicants' invention relates to a polyamide which contains a monoolefinically unsaturated monocarboxylic acid of the formula $CH_2=CH-(CH_2)_3-COOH$ chemically bonded at the end of the polymer chain via an amide group.[11]

---

7) *Bancorp Services, L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372, 69 USPQ2d 1996, 1999-2000 (Fed. Cir. 2004).

8) Cf. e.g. page 3, indicated lines 1 to 10, of the application, and the background art referenced therein.

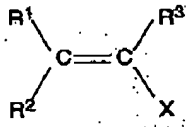
9) Cf. page 3, indicated line 12, to page 5, indicated line 11, of the application.

10) Cf. *Ex parte Wu*, 10 USPQ2d 2031 at 2033 (BPAI 1989).

11) Cf. e.g. Claim 1.

Anticipation under Section 102 can be found only if a reference shows *exactly* what is claimed.[12] The test for anticipation is one of identity, and the identical invention must be shown in the reference in as complete detail as is contained in the claim.[13] Since Rehmer et al.'s teaching does not pertain to polyamides the reference can clearly not be deemed to show exactly what is claimed by applicants. It is therefore respectfully requested that the respective rejection under Section 102(b) be withdrawn. Favorable action is solicited.

The Examiner also rejected Claims 1 to 6 under 35 U.S.C. §102(b) as being anticipated by the teaching of ***Blondel et al.*** (US 4,595,730) which pertains to polyamide polymers in which the polyamide chain is terminated at one end by an unsaturated group, and a variety of different types of unsaturated compounds are suitable to form the terminal unsaturated group.[14] The reference mentions as unsaturated compounds inter alia compounds of a formula (I)



(I)

in which R^1 to R^3 are hydrogen groups or alkyl, aryl, carboxyl, norbornyl, thienyl, pyrrolyl or furanyl, and the group X can inter alia denote a moiety $-(CH_2)_n-COOH$ in which n is 0 to 17.[15] The specific compound "$CH_2=CH-(CH_2)_8-COOH$" which is required in accordance with applicants' invention is, however, not mentioned in the reference. The teaching of ***Blondel et al.*** can therefore not be deemed to show exactly what is claimed by applicants or to show applicants' invention in as complete detail as is contained in applicants' claims.

At best, applicants' invention can be deemed to fall within the generic realm of ***Blondel et al.*** A generic disclosure is, however, not sufficient to anticipate each species or subgenus which happens to fall within the generic range of the disclosure.[16] The fact that claimed compounds may be encompassed by a disclosed generic formula

---

12) Cf. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985); *In re Marshall*, 577 F.2d 301, 198 USPQ 344 (CCPA 1978); *In re Kalm*, 378 F.2d 959, 154 USPQ 10 (CCPA 1967)

13) Cf. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989).

14) Cf. col. 2, indicated line 35, to col. 3, indicated line 44, of ***US 4,595,730***.

15) Cf. col. 2, indicated lines 37 to 59, of ***US 4,595,730***.

16) Note in particular *Corning Glass Works v. Sumitomo Electric U.S.A.*, 868 F.2d 1251, 9 USPQ2d 1962 (Fed. Cir. 1989), and *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992).

does not even by itself render the claimed compounds obvious.[17] The teaching of ***Blondel et al.*** is therefore not deemed to anticipate applicants' invention within the meaning of Section 102, and favorable reconsideration of the Examiner's respective position is respectfully solicited.

It is also respectfully submitted that the teaching of ***Blondel et al.*** is not deemed to be suited to render applicants' invention as disclosed and claimed in the application obvious within the meaning of Section 103(a). To establish a prima facie case of obviousness in a genus-species chemical composition situation, as in any other 35 U.S.C. §103 case, it is essential that there be some motivation or suggestion to make the claimed invention in light of the prior art teachings.[18] Fore example, the fact that a reference points to a preferred species or subgenus which differs significantly in structure from the claimed species or subgenus may weigh against the selection of the claimed species or subgenus and thus against a determination of obviousness.[19] Those circumstances are deemed to be applicable in the present case because the preferred representatives of the compounds (I) which are mentioned by ***Blondel et al.***[20] differ significantly from the 5-hexenoic acid which is required in accordance with applicants' invention. Moreover, the *"invention as a whole"* which is referenced in 35 U.S.C. §103(a) is not limited to the elements which are recited in the claims but also encompasses the properties which are inherent in the claimed combination of elements.[21] Applicants have found that the melt volume flow rate of the polyamides is significantly increased while the relative viscosity remains the same when the polyamide is modified to comprise a monoolefinically unsaturated monocarboxylic acid of the formula $CH_2=CH-(CH_2)_3-COOH$ chemically bonded at the end of the polymer chain via an amide group.[22] The particular and advantageous properties of the polyamides of applicants' invention are, for example illustrated

17) Cf. *In re Baird*, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994); *In re Jones*, 958 F.3d 347, 21 USPQ2d 1614 (Fed. Cir. 1992).

18) Cf. *In re Brouwer*, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996); *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)); *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991).

19) Cf. *In re Baird*, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994); *In re Jones*, 958 F.3d 347, 21 USPQ2d 1614 (Fed. Cir. 1992).

20) Cf. col. 2, indicated lines 60 to 68, of ***US 4,595,730***.

21) *In re Antonie*, 559 F.2d 618, 620, 195 USPQ 6, 8 (CCPA 1977).

22) Cf. page 1, indicated line 37, to page 2, indicated line 4, of the application.

by the investigations which are described on pages 10 to 12 of the application. The tests described in the enclosed Test Report were conducted to further illustrate the particular and advantageous properties of applicants' polyamides. Applicants employed in the experiments

(1) 5-hexenoic acid in accordance with the invention disclosed and claimed in the application;

(2) propionic acid as comparison;

(3) acrylic acid in accordance with the teaching of ***Blondel et al.*** as comparison; and

(4) hexanoic acid as comparison.

The melt volume flow rate (MVR) and the relative solution viscosity (RV) which were determined for the test samples are compiled in the following table:

Example	Acid	MVR [ml/110 min]	RV
1	5-hexenoic acid	196	2.0
2	propionic acid	181	2.0
3	acrylic acid	141	2.0
4	hexanoic acid	153	2.0

The data pertaining to comparative examples (2) and (3) show that the incorporation of an aliphatic acid, e.g. propionic acid, yielded in a polyamide having a higher MVR than the incorporation of an unsaturated acid of the same chain length, e.g. acrylic acid, corresponding to the teaching of ***Blondel et al.*** Additionally, the data pertaining to comparative examples (2) and (4) show that the incorporation of an acid having a shorter carbon chain, e.g. propionic acid, yielded in a polyamide having a higher MVR than the incorporation of an acid having a longer carbon chain, e.g. hexanoic acid. The results of the comparative tests would therefore suggest that a polyamide with a high MVR value is obtained when a short chain saturated acid is incorporated.

Quite contrary to the trends which are apparent from the comparative experiments, the polyamide according to applicants' invention which comprised 5-hexenoic acid exhibited a significantly higher MVR than the polyamide containing the aliphatic acid of the same chain length, and the MVR of applicants' polyamide was also significantly

higher than the MVR of the polyamide according to the teaching of ***Blondel et al.***

The data of the supplemental investigations confirm the particular and advantageous properties of the polyamides of applicants' invention which are illustrated by the data described in the application. If the Examiner deems it necessary applicants will provide the supplemental test report in form of a declaration under Rule 131.

In light of the foregoing it is respectfully urged that applicants' invention as disclosed and claimed meets the provisions of Sections 102, 103(a) and 112, ¶2, of the Patent Act, and that the application is in proper form. The application should, therefore, be in condition for allowance, and early action by the Examiner would be greatly appreciated by applicants.

REQUEST FOR EXTENSION OF TIME:

It is respectfully requested that a *three* month extension of time be granted in this case. The respective *$1020.00* fee is paid by credit card (Form PTO-2038 enclosed).

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account No. 14.1437. Please credit any excess fees to such deposit account.

Respectfully submitted,
NOVAK DRUCE DELUCA & QUIGG

James Remenick
Reg. No. 36,902

Customer No.: 26474
1300 Eye Street, N.W.
Suite 400 East Tower
Washington, D.C. 20005
(202) 659-0100

Encl.: SPECIFICATION AMENDMENTS (Appendix I)
TEST REPORT (Appendix II)

JR/BAS

060829